

more of the steps described or illustrated herein or include additional steps in addition to those disclosed.

[0087] While various embodiments have been described and/or illustrated herein in the context of fully functional computing systems, one or more of these example embodiments may be distributed as a program product in a variety of forms, regardless of the particular type of computer-readable media used to actually carry out the distribution. The embodiments disclosed herein may also be implemented using software modules that perform certain tasks. These software modules may include script, batch, or other executable files that may be stored on a computer-readable storage medium or in a computing system. These software modules may configure a computing system to perform one or more of the example embodiments disclosed herein.

[0088] The foregoing description, for purpose of explanation, has been described with reference to specific embodiments. However, the illustrative discussions above are not intended to be exhaustive or to limit the invention to the precise forms disclosed. Many modifications and variations are possible in view of the above teachings. The embodiments were chosen and described in order to best explain the principles of the invention and its practical applications, to thereby enable others skilled in the art to best utilize the invention and various embodiments with various modifications as may be suited to the particular use contemplated.

[0089] Embodiments according to the invention are thus described. While the present disclosure has been described in particular embodiments, it should be appreciated that the invention should not be construed as limited by such embodiments, but rather construed according to the below claims.

What is claimed is:

1. A method for routing Internet traffic, said method comprising:

receiving an IPv6 packet;
determining if said IPv6 packet comprises an extension header with geo-location information; and
responsive to a determination that said IPv6 packet comprises an extension header with geo-location information, performing an action based on said geo-location information, wherein said action is selected from the group consisting of: authenticating said IPv6 packet, prioritizing said IPv6 packet relative to other packets, routing said IPv6 packet, and monitoring of said IPv6 packet.

2. The method of claim 1, further comprising:

receiving a second IPv6 packet;
responsive to a determination that said second IPv6 packet does not comprise an extension header with geo-location information, treating said second IPv6 packet with regular priority.

3. The method of claim 1, wherein said receiving and said determining are performed by a device in the path of the router and a destination device.

4. The method of claim 3, wherein said device is selected from a group consisting of: a router, a load balancer or a switch.

5. The method of claim 1, wherein said authenticating comprises:

blocking said IPv6 packet based on its geographic location of origin.

6. The method of claim 1, wherein said prioritizing comprises:

prioritizing delivery of said IPv6 packet based on its location of origin relative to other IPv6 packets originating from different locations.

7. The method of claim 1, wherein said routing comprises: routing said IPv6 packet to a destination device closest in proximity to said geo-location information indicated in said extension header of said IPv6 packet.

8. The method of claim 1, wherein said monitoring comprises:

tracking said IPv6 packet and providing feedback to a network administrator regarding a path of said IPv6 packet through a network.

9. A non-transitory computer-readable storage medium having stored thereon instructions that, if executed by a computer system cause the computer system to perform a method for routing Internet traffic, said method comprising:

receiving a packet that is IPv6 over a communication network;

determining if said packet comprises an extension header with geo-location information; and

responsive to a determination that said packet comprises an extension header with geo-location information, performing an action based on said geo-location information, wherein said action is selected from the group consisting of: authenticating said packet, prioritizing said packet relative to other packets, routing said packet, and monitoring of said packet.

10. The computer-readable medium as described in claim 9, wherein said method further comprises:

receiving a second packet that is IPv6 over said communication network; and

responsive to a determination that said second packet does not comprise an extension header with geo-location information, treating said second packet with regular priority.

11. The computer-readable medium as described in claim 9, wherein said receiving and said determining are performed by a device in the path of the router and a destination device.

12. The computer-readable medium as described in claim 11, wherein said device is selected from a group consisting of: a router, a load balancer or a switch.

13. The computer-readable medium as described in claim 9, wherein said authenticating comprises:

blocking said packet based on its geographic location of origin.

14. The computer-readable medium as described in claim 9, wherein said prioritizing comprises:

prioritizing delivery of said packet based on its location of origin relative to other packets originating from different locations.

15. The computer-readable medium as described in claim 9, wherein said routing comprises:

routing said packet to a destination device closest in proximity to said geo-location information indicated in said extension header of said packet.

16. The computer-readable medium as described in claim 9, wherein said monitoring comprises:

tracking said packet and providing feedback to a network administrator regarding a path of said packet through a network

17. An apparatus for routing Internet traffic, said apparatus comprising: